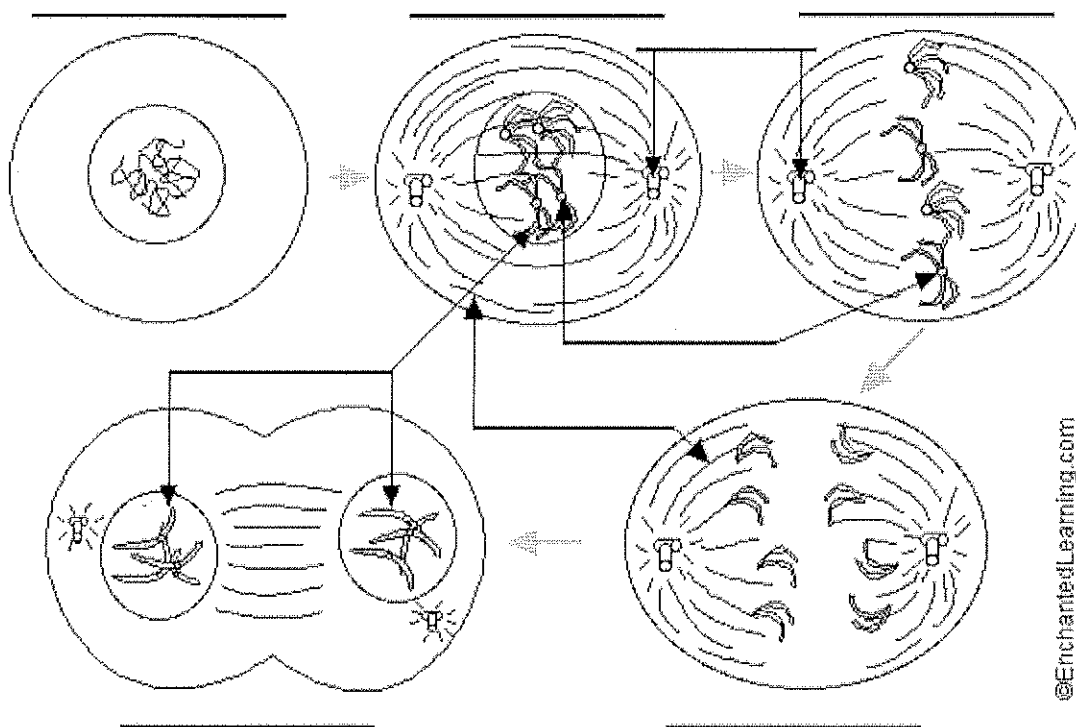


EnchantedLearning.com**Animal Cell Mitosis Label Me! Printout** Name _____

Label the mitosis diagram using the terms below.

Mitosis is the duplication and division of a eukaryotic cell's nucleus and nuclear material (DNA). The stages of mitosis are: [interphase (the cell when not undergoing mitosis, but the DNA is replicated)], prophase, metaphase, anaphase, and telophase.

Mitosis of an Animal Cell

Terms to Use:

Anaphase - the phase of mitosis in which the chromosomes begin to separate.

Centrioles - paired cylindrical organelles, arranged at right angles to each other, located at the center of a microtubule.

Centromeres - a centromere is the constricted region of a nuclear chromosome - microfibers attach to the centromere during mitosis.

Chromosomes - structures in the nucleus that contain DNA molecules that contain the genes.

Interphase - the phase of a cell's life cycle in which DNA is replicated.

Microtubules - tiny filaments (about 25 nanometers in diameter) that are active in mitosis.

Metaphase - the phase of mitosis in which the chromosomes line up at the equator (the central plane) of the cell.

Prophase - the phase of mitosis in which the duplicated chromosomes condense, the nuclear envelope dissolves, and centrioles divide and move to opposite ends of the cell.

Telophase - the last phase of mitosis, when the chromosomes migrate to opposite ends of the cell, two new nuclear envelopes form, and the chromosomes uncoil.